

## ABSTRACT

This invention enables determining whether a received frame is an erasure, a DTX mode frame or a CONT mode frame, using a metric  $m$  derived from the log likelihood ratio (LLR). The new metric is obtained by calculating the mean for the LLRs for a frame; a threshold  $T$  for this metric is also established. A received frame is declared a CONT frame if the CRC value indicates a successfully recovered frame, and  $m > T$ . A received frame is a DTX frame if  $m < T$ . Finally, a frame is declared an erasure if the CRC value indicates a failed frame, and  $m > T$ . The mean absolute LLR may also be used for determining the transmission rate of the system. In this case, a voice frame is decoded for all rates available; the transmission rate is that which corresponds to a passed CRC and has the highest  $m$ .